

Washington Sea Grant Hershman Fellowship  
Host Office Application

**1. Host organization**

Coast Salmon Foundation  
100 South I Street, Suite 103  
Aberdeen, WA 98520

Website: [www.coastsalmonpartnership.org](http://www.coastsalmonpartnership.org)

**2. Fellowship mentor/supervisor**

Dr. Mara Zimmerman  
Executive Director, Coast Salmon Partnership and Foundation

### 3. Position description

#### *Background*

This fellowship is offered by the Coast Salmon Foundation, which is a Washington State 501 (c) (3) non-profit corporation and the fiscal sponsor of the Coast Salmon Partnership. The Coast Salmon Partnership is a Washington State salmon recovery organization established in 2009 by Interlocal Agreement among Tribes, counties, and cities in the Washington Coast Region. The Washington Coast Region covers 3.75 million acres, and includes all watersheds that drain directly into the Pacific Ocean between Cape Flattery and Cape Disappointment. Unlike most areas of Washington State, salmon runs in the Washington Coast Region are healthy enough that they are not federally listed under the Endangered Species Act. The Coast Salmon Partnership works to keep our salmon runs, our livelihoods, and the way of life that depends on them healthy in some of the last best habitats for salmon in Washington state.

The Fellow will lead development of a Climate Adaptation Framework for salmon habitat protection and restoration in the Washington Coast Region. The Fellow is responsible for conducting literature reviews, convening subject-matter experts and stakeholders, and preparing written summaries and recommendations. The Fellow will work closely with the Executive Director (Mara Zimmerman), Program Director (Ned Pittman), and the Climate Adaptation Framework core team. While the core team is still in development, participation is anticipated from Wild Salmon Center, The Nature Conservancy, and the Quileute Tribe.

#### *Project overview*

Increasing floods and droughts and changing ocean conditions are among many factors that threaten sustainability of salmon runs in the Washington Coast Salmon Recovery Region. These climate impacts are identified as threats to salmon in the [Washington Coast Sustainable Salmon Plan](#), and there is a need to translate anticipated problems into solutions that can be acted on.

In 2020, the Coast Salmon Partnership initiated a focus on climate adaptation of our habitat protection and restoration actions and identified that available science needed to be translated to better describe the connections between climate impacts, the biology of salmonid species, and habitat protection and restoration. In 2021, the Coast Salmon Partnership held a [science symposium](#) and heard from lead scientists in the Pacific Northwest on the topic of salmon habitat in a changing climate. Our keynote speaker reminded participants that while the climate vulnerabilities of salmon are now generally understood, climate adaptation strategies are just starting to emerge. As such, the development of a climate adaptation framework for salmon habitat protection and restoration is both timely and relevant for the Washington Coast Region.

#### *Major project components*

The Climate Adaptation Framework will identify habitat protection and restoration actions that increase climate resiliency of salmon species for the Washington Coast Region. Habitat protection refers to actions that prevent future degradation of salmon habitat (e.g., regulations and land management plans). Habitat restoration refers to actions that improve degraded salmon habitat (e.g., fish passage, floodplain reconnection, riparian restoration).

Habitat protection and restoration actions can promote climate resiliency at two complementary levels – project design and watershed planning. As a result, the Climate Adaptation Framework will

be organized around two questions: 1) How do we 'future proof' salmon restoration projects? 2) Where are the best opportunities to improve climate resilience of salmon? Some of the answers exist in geospatial data sets and scientific publications and simply need to be translated into a digestible format for the community of restoration professionals. However, other information needs to be extracted by asking the right questions of subject-matter experts and gleaned from local stakeholder input.

With technical and stakeholder input, the core team will develop a watershed-specific climate resiliency index that reflects opportunities to improve climate resiliency of salmon through habitat protection and restoration. The index will be informed by three components of climate resiliency – exposure, sensitivity, adaptability. Exposure and sensitivity reflect the ecological potential of the ecosystem in a changing climate, while adaptability reflects the capacity of human systems to respond to changing conditions. A Decision Support Tool will be used to quantify these components and organize information in a systematic and transparent manner.

A series of workshops with subject-matter experts are envisioned to gather the best available science and develop the technical foundation for the Climate Adaptation Framework. A second set of workshops with local stakeholders in coastal communities are envisioned to share technical information, gather information on habitat protections already in place (e.g., shoreline master plans, timber harvest management plans), and identify social benefits and costs of habitat protection and restoration.

Development of the Climate Adaptation Framework is anticipated to be an 18-month process. Through the Washington Sea Grant Hershman Fellowship, the Fellow will be an integral part of the core working team for the first 12 months of the process. If mutually agreeable, there may be an option for an additional 6-month term position with the Coast Salmon Foundation to engage in and support the final months of developing the framework.

#### *Professional development and networking opportunities*

The Fellow will benefit from a background in climate science, salmon ecology, and geographic information systems as well as strong communication and writing skills and familiarity with natural resource and land use policy in Washington State.

The Fellow will work with technical and policy staff from partner organizations that are focused on natural resource management on Washington's outer coast. This includes Tribal natural resource departments, local governments, state and federal agencies, conservation and non-profit organizations. Depending on the Fellow's interests, professional development opportunities exist for a mix of technical and policy issues related to climate change and natural resource policy. The Fellow will gain organizational management skills and refine their communication and writing skills in a professional environment. There will also be opportunities for the Fellow to demonstrate leadership and project management skills, hold small group and one-on-one discussions, and co-author written products.

